



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,714	09/29/2003	Yuji Horie	NMCIP042	6324
22434	7590	10/25/2006		
BEYER WEAVER & THOMAS, LLP P.O. BOX 70250 OAKLAND, CA 94612-0250				
			EXAMINER AHMED, SHAMIM	
			ART UNIT 1765	PAPER NUMBER

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,714

Applicant(s)

HORIE ET AL.

Examiner

Shamim Ahmed

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/14/06 have been fully considered but they are not persuasive. Applicants argue that Yoshizawa does not teach the abrading particles of monocrystalline diamond particles having corner and METADI catalog does not show all monocrystalline diamond particles have corners, whereas METADI catalog tends to show that it is public knowledge that round edges and angular, blocky-shaped edges are distinguishable.

In response, examiner states that the argument/statement is not persuasive because METADI catalog shows clearly that monocrystalline diamond particles have sharp corners and polycrystalline diamond cluster have blocky-shaped with greater number of cutting facets than the monocrystalline diamond particles.

Therefore, Yoshizawa's diamond particles have corners unless specified that applicant's diamond particles have different size of the corners.

As regards to Kendall, applicants argue that Kendall does not describe any cluster particles or coagulated particles are supplied onto the surface of a magnetic hard disk.

In response, examiner noted that the claims are limited to a polishing slurry comprises abrading particles that are cluster of particles of monocrystalline diamond particles and Kendall's abrading particles comprises polycrystalline diamond particles, which is cluster of particles of monocrystalline diamond particles and meets all the claimed limitations (see the rejection).

So, the rejections of the previous office action are repeated herein as below:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoshizawa et al (JP-404362397) as evidenced with Article METADI diamond suspensions.

Yoshizawa et al teach a composition comprises diamond grain cluster of less than 100 angstroms (<10 nm) in average size, reads on the claimed particles diameters in the range of 1-10 nm and the diamond particles are dispersed in water-based aqueous solution (see the abstract).

Yoshizawa et al teach that the roundish diamond grain inherently includes corners as evidenced by the Diamond suspensions article.

In the above, it is the examiner position that the roundish is not completely round.

The intended use of the composition used as a polishing slurry for texturing a surface of a magnetic hard disk is not given patentable weight and even given the

patentable weight, Yoshizawa et al's composition is exactly same as the instant invention and the composition is capable of texturing the disk as a polishing slurry.

4. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kendall et al (US 2003/0194961 A1).

The preamble limitation of "polishing slurry for texturing a surface of a magnetic hard disk substrate" is not given patentable weight because a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Kendall et al teaches the use of abrasive particles of mono or polycrystalline diamond particles having average particles size of .0001-300 micrometer, which meets the claimed range, wherein the abrasives are dispersed in liquid aqueous medium (see paragraphs 0031-0032).

Kendall et al also disclose the abrasive particles may have different shapes including corners (paragraph 0035).

Additionally, the monocrystalline diamond particles inherently include corners.

Kendall et al also teach surfactants may be used in the composition, wherein the surfactant can be non-ionic surfactant (paragraph 0038).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

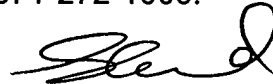
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shamim Ahmed
Primary Examiner
Art Unit 1765

SA
October 21, 2006